We Claim:

1. A system for controlling and coordinating activities among entities in an information and process environment comprising:

a) a communications pathway for transmitting and receiving communications of said entities; and

b) a shared memory connected to said communications pathway for maintaining a tuple space on which said entities post and receive messages synchronized to discrete time intervals.

2. The system of claim 1 wherein said messages are in the form of tuples and anti-tuples.

3. The system of Claim 1, wherein said entities include at least one entity that asserts a tuple on said tuple space signaling its intention to perform an action and asserts and anti-tuple on said tuple space for evaluating outcomes of said intention; and at least at one further entity which asserts an anti-tuple for detecting said intentions.

4. The system of Claim 3, wherein said tuples include a duration parameter for limiting the duration thereof in said tuple space.

5. The system of claim 4 wherein said duration parameter is a multiple of said discrete time intervals.

6. The system of claim 5 wherein said tuples are removed from said tuple space after said duration has elapsed.

7. The system of claim 1 wherein said entities are hardware devices.

8. The system of claim 1 wherein said communication pathway is a network or bus.

9. A method for controlling and coordinating activities among entities in an information and process environment comprising the steps of:

a) providing a communications pathway for transmitting and receiving

communications of said entities;

b) providing a tuple space in a shared memory adapted for operation in discrete time intervals connected to said communications pathway; and

c) posting and receiving messages of said entities to and from said tuple space synchronized to said discrete time intervals.

10. The method of claim 9 wherein said messages are in the form of tuples and anti-tuples.

11. The method of Claim 9, wherein said entities include at least one entity that asserts a tuple on said tuple space signaling its intention to perform an action and asserts and anti-tuple on said tuple space for evaluating outcomes of said intention; and at least at one further entity which asserts an anti-tuple for detecting said intentions.

12. The method of Claim 11, wherein said tuples include a duration parameter for limiting the duration thereof in said tuple space.

13. The method of claim 12 wherein said duration parameter is a multiple of said discrete time intervals.

14. The method of claim 13 wherein said tuples are removed from said tuple space after said duration has elapsed.

15. The method of claim 9 wherein said entities are hardware devices.

16. The method of claim 9 wherein said communication pathway is a network or bus.

17. A method of call processing comprising the steps of:

a) providing entities representative of call processing features;

b) providing a communications pathway for transmitting and receiving communications of said entities;

c) providing a tuple space in a shared memory adapted for operation in discrete time intervals connected to said communications pathway;

d) requesting advice by a first of said entities desirous of taking action of other said entities before taking said action by posting messages communicated on said tuple

space to said other entities through said pathway;

e) providing advice as desired by said other entities responsive to said messages by posting responding messages communicated on said tuple space to said first of said entities;

f) evaluating said responding messages, if any, by said first of said entities; and

g) taking advised action by said first of said entities after said evaluating said responding message.

18. The method of claim 17 wherein said advised action ignores or overrides said responding messages.

19. The method of claim 17 wherein said messages and said responding messages are in the form of tuples and anti-tuples.

20. The method of Claim 19 wherein said tuples include a duration parameter for limiting the duration thereof in said tuple space.

21. The method of claim 20 wherein said duration parameter is a multiple of said discrete time intervals.

22. The method of claim 21 wherein said tuples are removed from said tuple space after said duration has elapsed.

23. The method of claim 17 wherein said entities are software processes operating in memory under control of a processor.

24. The method of claim 17 wherein said entities are represented by agents.

25. The method of claim 17 wherein said communication pathway is a network or bus.

26. A method for providing services in an automated contract environment comprising the steps of:

a) providing a communications pathway for transmitting and receiving communications of application entities and service entities;

b) providing a tuple space in a shared memory adapted for operation in discrete time intervals connected to said communications pathway; and

c) posting and receiving messages of said application entities and said service entities to and from said tuple space synchronized to said discrete time intervals.